UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,527	01/27/2004	Tetsuro Motoyama	245419US2	8977

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER
FEARER, MARK D

ART UNIT	PAPER NUMBER
2143	

NOTIFICATION DATE	DELIVERY MODE
08/28/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

PTOL-90A (Rev. 04/07)

5

Office Action Summary	Application No.	Applicant(s)
	10/764,527	MOTOYAMA ET AL.
	Examiner	Art Unit	
	Mark D. Fearer	2143	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>27 January 2004</u>.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-23</u> is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-23</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>27 January 2004 and 16 August 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date <u>See Continuation Sheet</u>.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

U.S. Patent and Trademark Office
PTOL-326 (Rev. 08-06)   Office Action Summary   Part of Paper No./Mail Date 20070814

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :4/26/04, 11/9/04, 3/18/05, 10/26/05, 12/21/05, 5/1/06, 6/27/06, 12/1/06.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statements submitted on 26April2004,

09November2004, 18March2005, 26October2005, 21December2005, 01May2006,

27June2006, and 01December2006 have been considered by the Examiner and made

of record in the application file.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome

by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

the reference was derived from the inventor of this application and is thus not an

invention "by another"; (2) a showing of a date of invention for the claimed subject

matter of the application which corresponds to subject matter disclosed but not claimed

in the reference, prior to the effective U.S. filing date of the reference under 37 CFR

1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and

reference are currently owned by the same party and that the inventor named in the

application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer

in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing

that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under

35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Claims 1-3, 5-11, 13-18, and 20-23 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Anderson et al. (US 20020091815 A1) in view of Brown et al. (US

6209037 B1) in further view of Farrell et al. (US 5218680 A).

Consider claims 1-3, 9-11, and 16-18. Anderson et al. discloses a system and

method wherein the status of a network device is checked using a selected protocol

(("FIG. 2 illustrates a high-level logical representation of a system of the invention. A

network enabled device 200, or a software application executing on that device, is to be

monitored as a component of an enterprise. Examples of such devices are servers,

workstations, network appliances and network printers as mentioned in connection with

enterprise 100 from FIG. 1. Device 200 reports status information messages to a

gateway 202 using a particular protocol, two examples of protocols being HTTP and

TCP socket based protocols. Such messages may be initiated by an event, such as a

timer expiring or an error condition, or by a status request message from gateway 202.")

paragraph 0035). However, Anderson et al. fails to disclose a system and method

comprising matching a protocol with a device model, or attempting a generic device, or

further testing if said protocol supports said device. Brown et al. discloses different

models of motion control devices that define their own communication protocol (("Each

brand or model of motion control device contains communication software that defines a

communication protocol that is responsible for transmitting control codes and receiving

response codes used to control the hardware to perform motion operations and to

retrieve codes describing the results of the operation. This internal communication

software is machine specific, and an application program written to communicate using

the communication protocol associated with one brand or model of motion control

device will likely not be able to communicate with the communication protocol

associated another brand or model of motion control device.") column 2 lines 21-33) a

generic device driver (("The driver 30 is used by both the driver administrator 32 and the

component 35. Its main purpose is to implement functionality that generates motion

control commands for the specific hardware supported. For example, the AT6400 driver,

used to control the Compumotor AT6400 motion control hardware, generates AT6400

command codes. During the initialization phase of the system 22, the driver

administrator 32 communicates with each driver 30, allowing the user to add, remove,

or change the configuration of the driver. When an application, using the system 22, is

run, the component 35 communicates with the driver 30 directing it to carry out the

appropriate motion control operations. This section describes the complete design of a

generic driver 30. All drivers are designed from the base design described in this

manual. This section is divided into three parts. First, a module interaction-map that

describes all binary modules that interact with the driver 30 is discussed. Next, the

module interaction-map is drawn as an object interaction-map, where all the internals of

the driver are exposed. In this map, all C++ objects, making up the driver, and their

interactions are shown. Next, several scenario-maps are drawn. Each scenario-map

displays the interactions taking place between the C++ objects involved during a certain

process. Finally, this section describes the interfaces exposed by the driver component,

all data structures used, and the definitions of each C++ class used.") column 12 lines

39-64) and further testing after communication is established (("Next, the CModuleMgr

creates a new CsimpleStream object and directs it to verify and load the stream

component. The CSimpleStream first verifies that the module is actually an stream

component 28 by calling its exported DLLGetModuleType function. If the function

returns XMC_STREAM_MT, the CSimpleStream continues and registers the stream

component by calling its DLLRegisterServer exported function. Finally, the

CsimpleStream object queries the new module for its CLSID by calling the module's

exported DLLGetCLSID function. The new CLSID is used, by the CSimpleStream, to

load the stream component using the standard OLE function CoCreateInstance. If the

CsimpleStream succeeds, the CLSID of the stream is passed along to the

CSimpleDriver who is directed to register the stream. The CSimpleDriver passes the

CLSID to the driver component and directs it to register the stream.") column 24 lines

65-67 and column 25 lines 1-13). Therefore, it would have been obvious to a person of

ordinary skill in the art at the time the invention was made to incorporate a system and

method comprising matching a protocol with a device model, attempting communication

using a generic device, and further testing if said protocol supports said device as

taught by Brown et al. with a system and method wherein the status of a network device

is checked using a selected protocol as taught by Anderson et al. for the purpose of

remote network device management. However, Anderson et al., as modified by Brown

et al., fails to disclose a system and method for removing protocol information from a

device. Farrell et al. discloses a system and method comprising removal of protocol

related framing information (("... autonomously performed protocol framing functions

(insertion / removal of protocol related framing information on transmission/reception),

enables the subject device to further relieve the host system of functional

responsibilities normally assumed at a higher level within the host system.") column 4

lines 67-68 and column 5 lines 1-4 ("Detection and deletion of protocol specific

characters and control signal patterns from data passed to RV; e.g. HDLC flag

characters (01111110), idle patterns (15 or more consecutive 1's), and abort patterns (7

to 14 consecutive 1's). As such characters and patterns are detected they are discarded

(not passed to RV).") column 53 lines 44-50).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to incorporate a system and method comprising

removal of protocol related framing information as taught by Farrell et al. with a system

and method comprising matching a protocol with a device model, attempting

communication with a generic device, further testing if said protocol supports said

device, and the status of a network device being checked using a selected protocol as

taught by Anderson et al., as modified by Brown et al., for the purpose of configuring

networks and devices.

Consider claims 5, 13, and 20, and as applied to claims 1, 9, and 16,

respectively. Anderson et al., as modified by Brown et al. and Farrell et al., further

discloses a method wherein the step of determining if a network device can be

accessed comprises: transmitting, to the network device, information for accessing the

network device using a selected communication protocol; receiving, by the network

device, the transmitted information; and determining if the network device responds to

the received information indicating that the network device can be accessed using the

selected communication protocol (("Each brand or model of motion control device

contains communication software that defines a communication protocol that is

responsible for transmitting control codes and receiving response codes used to control

the hardware to perform motion operations and to retrieve codes describing the results

of the operation. This internal communication software is machine specific, and an

application program written to communicate using the communication protocol

associated with one brand or model of motion control device will likely not be able to

communicate with the communication protocol associated another brand or model of

motion control device. Accordingly, it would be desirable for a programmer to be able to

write an application program that is independent of the hardware communication

protocol so that the application program may be used with different hardware devices

without modification by the programmer.") Brown et al., column 2 lines 22-38).

Consider claims 6 and 21, and as applied to claims 1 and 16, respectively.

Anderson et al., as modified by Brown et al and Farrell et al., discloses a method

comprising: selecting, obtaining, determining, removing, and performing steps for each

protocol of the plurality of communication protocols. Anderson et al. further discloses a

method comprising repeating a process until a queue is empty (("At the top of the loop,

a decision 902 is made as to whether or not there are any messages in the high priority

queue. If there are, execution continues to step 906, in which the first, or oldest,

message is selected in the high-priority queue. Execution continues from step 906 to

step 908, in which the selected message is sent to the superintendent system.

Execution then continues from step 908 to step 910, in which the message is removed

from the high-priority queue preventing a duplicate sending, following which the loop is

repeated at step 902. If there was not a message in the high priority queue on execution

of step 902, decision 904 is executed directing further execution on the basis of a

message in the low priority queue. If no message is pending, the loop is repeated at

step 902, optionally including a delay in step 918 so unnecessary processor cycles are

not consumed. If there is a message in the low priority queue execution proceeds from

step 904 to step 912, in which the first, or oldest, message in the low priority queue is

selected. Execution proceeds from step 912 to step 914, in which the selected message

is sent to the superintendent system. Execution then proceeds from step 914 to step

916, in which the selected message is removed from the low priority queue. Following

execution of step 916 the loop is repeated at step 902.") Anderson et al., paragraph

0063).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to incorporate a method comprising repeating a

process until a queue is empty as taught by Anderson et al. with a method comprising:

selecting, obtaining, determining, removing, and performing steps for each protocol of

the plurality of communication protocols as taught by Anderson et al., as modified by

Brown et al. and Farrell et al., for the purpose of obtaining status information of a

network device.

Consider claims 7, 14, and 22, and as applied to claims 1, 9, and 16,

respectively. Anderson et al., as modified by Brown et al. and Farrell et al., further

discloses a method wherein a selecting step comprises: selecting the communication

protocol among SNMP, HTTP, and FTP (("SNMP translator 214 is a software system that receives request messages for a particular device 200 from enterprise management system 216 using the enterprise management system protocols, SNMP being one possible protocol. Such request messages may include, but are not restricted to, requests to configure device settings and requests for status information. The request message is converted into one or more messages in the notification channel protocol, intending to cause a response from the particular device 200 with the information required by the request message. Such conversion is facilitated by information from MIB mapper 218. The converted messages are placed into notification channel 208, and received by a gateway 202 subscribed to receive messages for the particular device. Gateway 202 translates each message into the protocol used by the particular device 200 and transmits them thereto. If in condition to respond, the particular device 200 then submits a response for each message to SNMP translator 214 through gateway 202 and notification channel 208. SNMP translator 214 then builds and submits a response to the original request message to enterprise management system 216 in the protocol used thereto.") Anderson et al., paragraph 0042).

Consider claims 8, 15, and 23, and as applied to claims 1, 9, and 16, respectively. Anderson et al., as modified by Brown et al. and Farrell et al., discloses a method comprising further testing steps after a communication has been established (("Next, the CModuleMgr creates a new CsimpleStream object and directs it to verify and load the stream component. The CSimpleStream first verifies that the module is actually an stream component 28 by calling its exported DLLGetModuleType function. If

the function returns XMC_STREAM_MT, the CSimpleStream continues and registers

the stream component by calling its DLLRegisterServer exported function. Finally, the

CsimpleStream object queries the new module for its CLSID by calling the module's

exported DLLGetCLSID function. The new CLSID is used, by the CSimpleStream, to

load the stream component using the standard OLE function CoCreateInstance. If the

CsimpleStream succeeds, the CLSID of the stream is passed along to the

CSimpleDriver who is directed to register the stream. The CSimpleDriver passes the

CLSID to the driver component and directs it to register the stream.") Brown et al.,

column 24 lines 65-67 and column 25 lines 1-13). However, Anderson et al., as

modified by Brown et al. and Farrell et al., fails to disclose a method comprising further

testing steps after a communication has been established wherein the selected protocol

is SNMP. Anderson et al. discloses a system and method wherein an original SNMP

message is wrapped into a notification protocol message by including the SNMP

message in the substantive message field (("A message in the notification protocol must

contain at least two information fields. One required field is an identifier for the sender.

The other required field is a substantive message that is meaningful to the destination.

In a preferred embodiment a service identifier and security token is provided, whereby

the message may be authenticated against a number of service types. In that preferred

embodiment a severity declaration is also provided, whereby messages of higher

importance may be specially treated. Optional fields may contain the time the message

was generated or created, the time the message was received at the destination, the

subsystem that originated the message, the object oriented method that originated the

message, and a plain text error message. Optionally an SNMP OID may be contained in

the message to facilitate delivery to the destination. In a preferred embodiment an

original SNMP message is wrapped into a notification protocol message by including

the SNMP message in the substantive message field.") Anderson et al., paragraph

0037).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to incorporate an original SNMP message is wrapped

into a notification protocol message by including the SNMP message in the substantive

message field as taught by Anderson et al. with a method comprising further testing

steps after a communication has been established as taught by Anderson et al., as

modified by Brown et al. and Farrell et al., for the purpose of determining the status of

network devices.

Claims 4, 12, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Anderson et al. (US 20020091815 A1) in view of Brown et al. (US 6209037 B1) in

further view of Farrell et al. (US 5218680 A) and in further view of Austin et al. (US

4885684 A).

Consider claims 4, 12, and 19, and as applied to claims 1, 9, and 16,

respectively. Anderson et al., as modified by Brown et al. and Farrell et al., discloses a

system and method comprising obtaining information from a device object, matching a

protocol with a device model, attempting communication with a generic device, further

testing if said protocol supports said device, and the status of a network device being

checked using a selected protocol. However, Anderson et al., as modified by Brown et

al. and Farrell et al., fails to disclose a system and method wherein the obtaining step

comprises: obtaining, from the device object, a protocol parameter map comprising at

least one entry, wherein each entry comprises a protocol string and a corresponding

vector of information used to access the network device using a protocol indicated in the

protocol string. Austin et al. discloses a system and method comprising map dimension

and resolution parameters, a macro string, an association of an object to a device, and

a set of vector addresses (("The SAR graph external interfaces (FIG. 10) include two

receive interfaces for command program motion compensation and map rotation

control, the sensor-data input and map data output interfaces, and a graph constant

interface for specification of the SAR map dimension and resolution parameters. This

black box representation of the SAR graph, including detailed specifications of the

interface data structures and message formats, illustrates the external graph

specification that is used by the command program designer. The internal features of

the graph are primarily the concern of the graph programmer.") column 15 lines 57-68

("A primitive/macro development language, assembler and simulator are provided for

the microprogrammable FPPE. A macro string simulator is also provided for the FPPE,

to support unit testing of FPPE graph tasks or subtasks. A similar set of microcode tools

will be provided for the VSPE and other microprogrammable processing elements as

they are added to the CSP architecture.") column 17 lines 14-21 ("After all objects have

had their control blocks created the objects will be assigned to an allocation unit (AU).

An AU is the smallest relocatable entity known to the operating system. Multiple objects

may be grouped into the same AU if the following rules are not broken. They are if the

objects have been assigned to the same device, and if the AU does not become larger

than the maximum AU size.") column 20 lines 9-17 ("Group all objects which have been

assigned to the same device into list.") column 20 lines 20-21 ("FIG. 15 is an example of

one type of resolution for relating the location of control blocks. A master control block

shown in FIG. 15 tells the local operating system (LOS) for a particular data processing

element, where the control blocks are located for a particular task which is assigned to

that data processing element. The contents of the master control block is a set of vector

addresses which tells the local operating system how to modify the contents of a local

control block is reflect the relationship and locations of other control blocks within the

distributed system for other tasks executed on other ones of the data processing

elements in the network. The example shown in FIG. 15 keeps track of data paths in the

network. Other types of master control blocks will keep track of the location of

associated storage elements, addresses of other control blocks, and other information

necessary to enable a coordinated operation of the various distributed processing

elements in the network.") column 21 lines 3-21).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to incorporate a system and method comprising map

dimension and resolution parameters, a macro string, an association of an object to a

device, and a set of vector addresses as taught by Austin et al. with a system and

method comprising obtaining information from a device object, matching a protocol with

a device model, attempting communication with a generic device, further testing if said

protocol supports said device, and the status of a network device being checked using a

selected protocol as taught by Anderson et al., as modified by Brown et al. and Farrell

et al., for the purpose of object identification.

Conclusion

Any response to this Office Action should be faxed to (571) 273-8300 or mailed

to:

Commissioner for Patents
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Customer Service Window
Randolph Building
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Any inquiry concerning this communication or earlier communications from the

Examiner should be directed to Mark Fearer whose telephone number is (571) 270-

1770. The Examiner can normally be reached on Monday-Thursday from 7:30am to

5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's

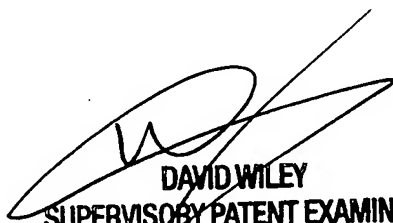supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for

the organization where this application or proceeding is assigned is (571) 273-

8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free) or 571-272-4100.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist/customer service whose telephone

number is (571) 272-2600.

Mark Fearer
M.D.F./mdf
August 20, 2007

DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100